

Android debugging over bluetooth (without root)

Jul 19, 2013 • zcourts

So I'm on a train to Reading and wanted to continue working on an app I've been hacking at but my USB cable is annoyingly inconvenient and Ubuntu keeps throwing a fit because I haven't been able to configure it to properly handle MTP enabled devices. To get debugging going here's what I've just done.<!-- more -->

Connect the phone via USB and from the terminal enter (to run adb in tcp ip mode)

```
adb tcpip 4455
```

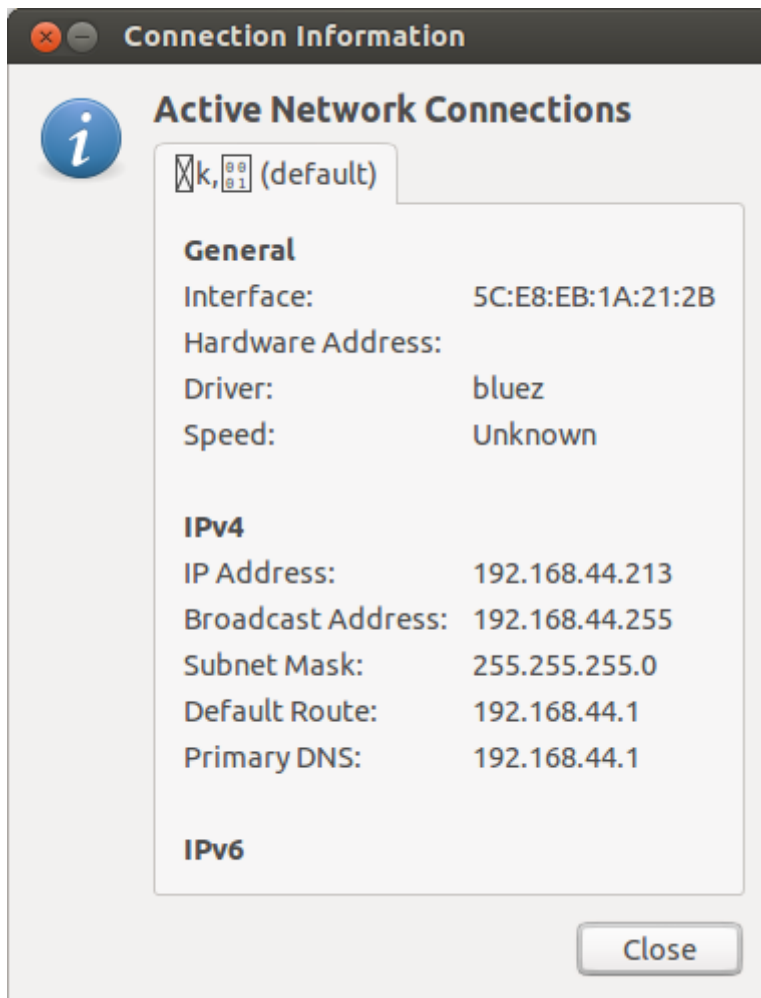
Now on the phone enable debugging from Settings -> Developer options -> enable debugging.

Next enable bluetooth and pair the phone with the laptop. Once paired, unpair the two and on the android device go to Settings -> Tethering and portable hotspot then enable "Bluetooth tethering"

Now go back to settings -> Bluetooth and repair the device with the laptop.

On Ubuntu click your network icon in the task bar to list the available networks

In Ubuntu click the network icon again after successfully connecting to the bluetooth network and click "Connection information" towards the bottom.



(<http://crlog.files.wordpress.com/2013/07/bluetooth-screenshot-from-2013-07-19-114005.png>)

From the window that opens, note the Primary DNS IP. Copy it, write it down, whatever you need to but you need it for the next step.

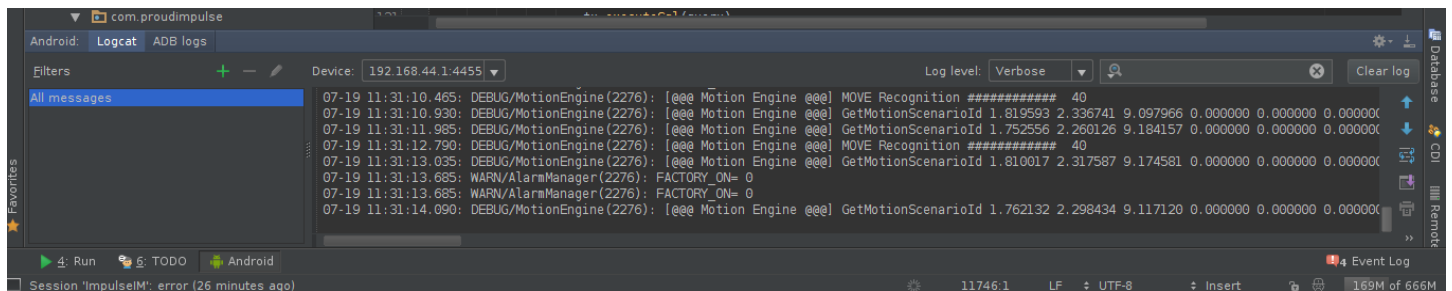
Now from the command line again enter:

```
adb connect 192.168.44.1:4455
```

That should produce

connected to 192.168.44.1:4455

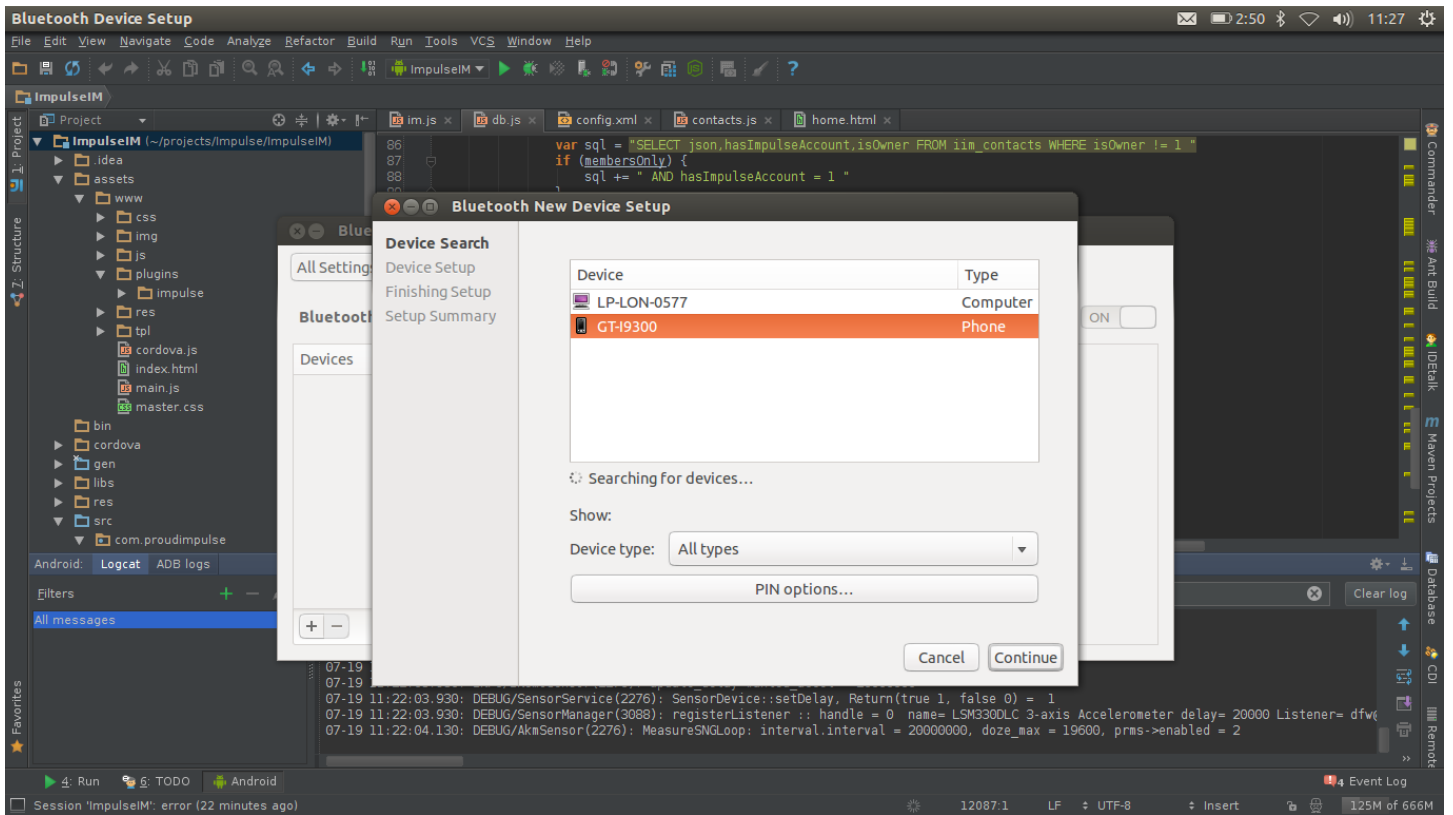
Now if you're using Eclipse, IntelliJ or any other IDE with adb support you can look at logcat to start seeing logs from the device:



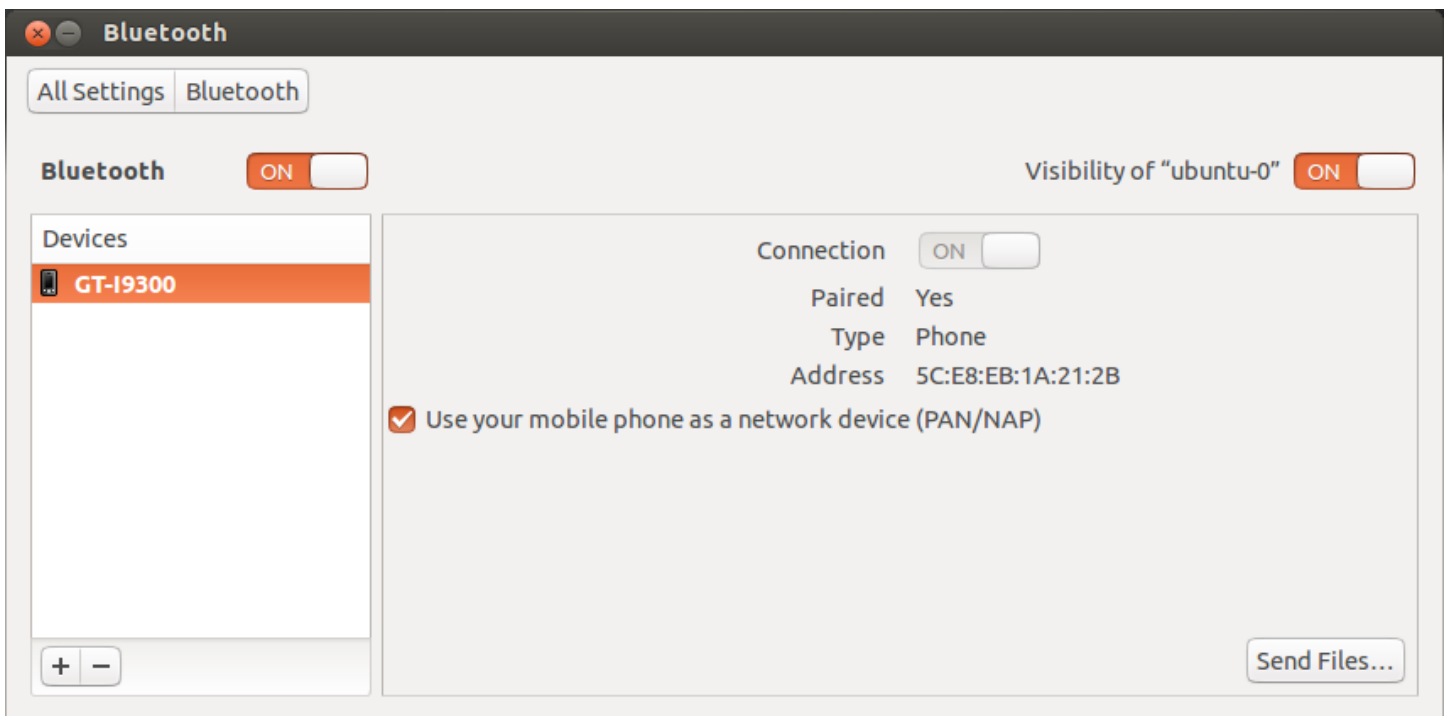
(<http://crlog.files.wordpress.com/2013/07/bluetooth-screenshot-from-2013-07-19-113114.png>)

From here on you can deploy your App to the device and/or debug it without a USB. And obviously each time just pair the devices and reconnect. You won't have to repeat all the steps - just those two.

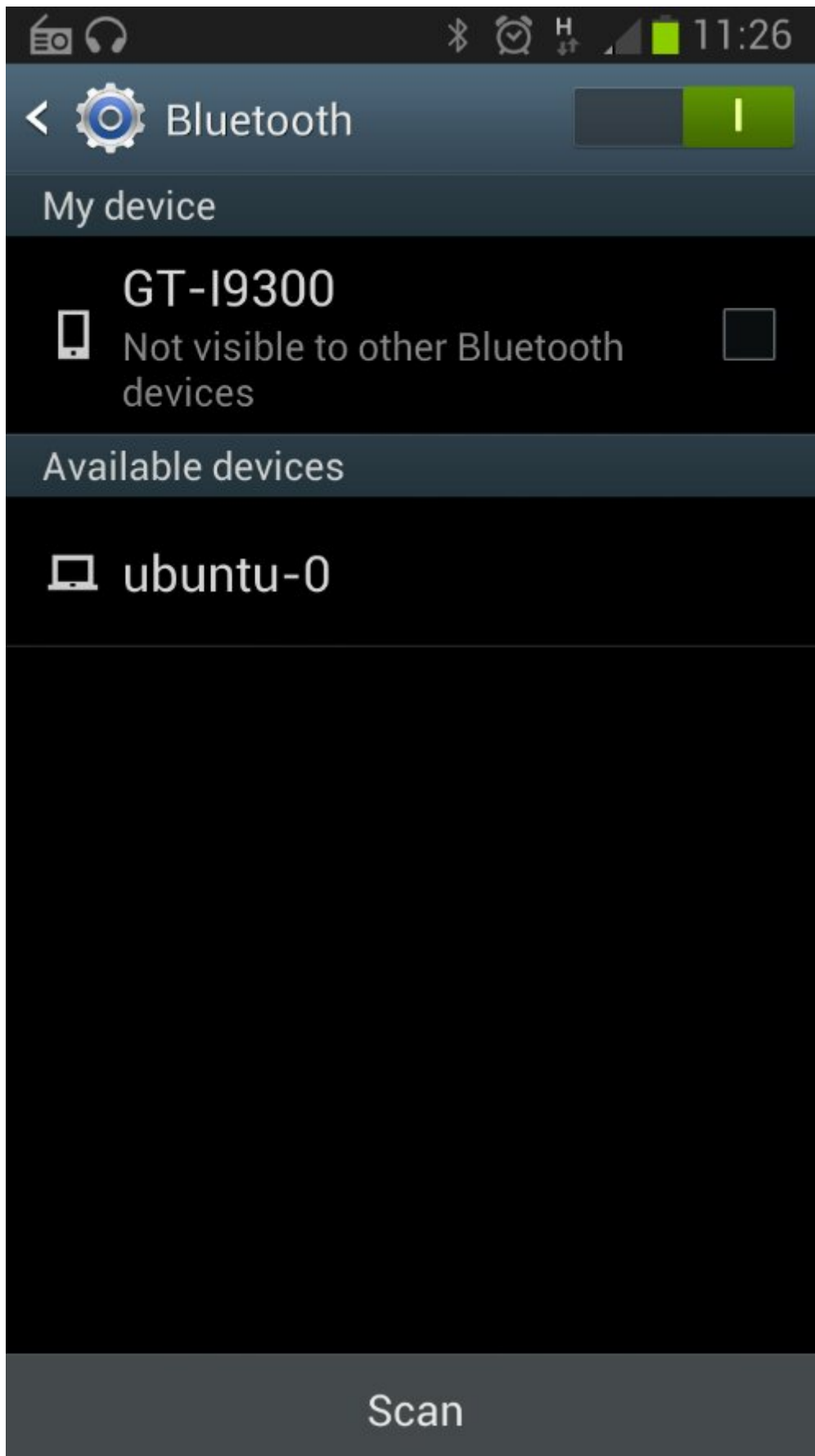
Below are a series of screenshots that might help. They're in no particular order, I'm writing this post on the train and taking screenshots on the phone and laptop and uploading from both directly to the same post so it is what it is but should hopefully still be useful.



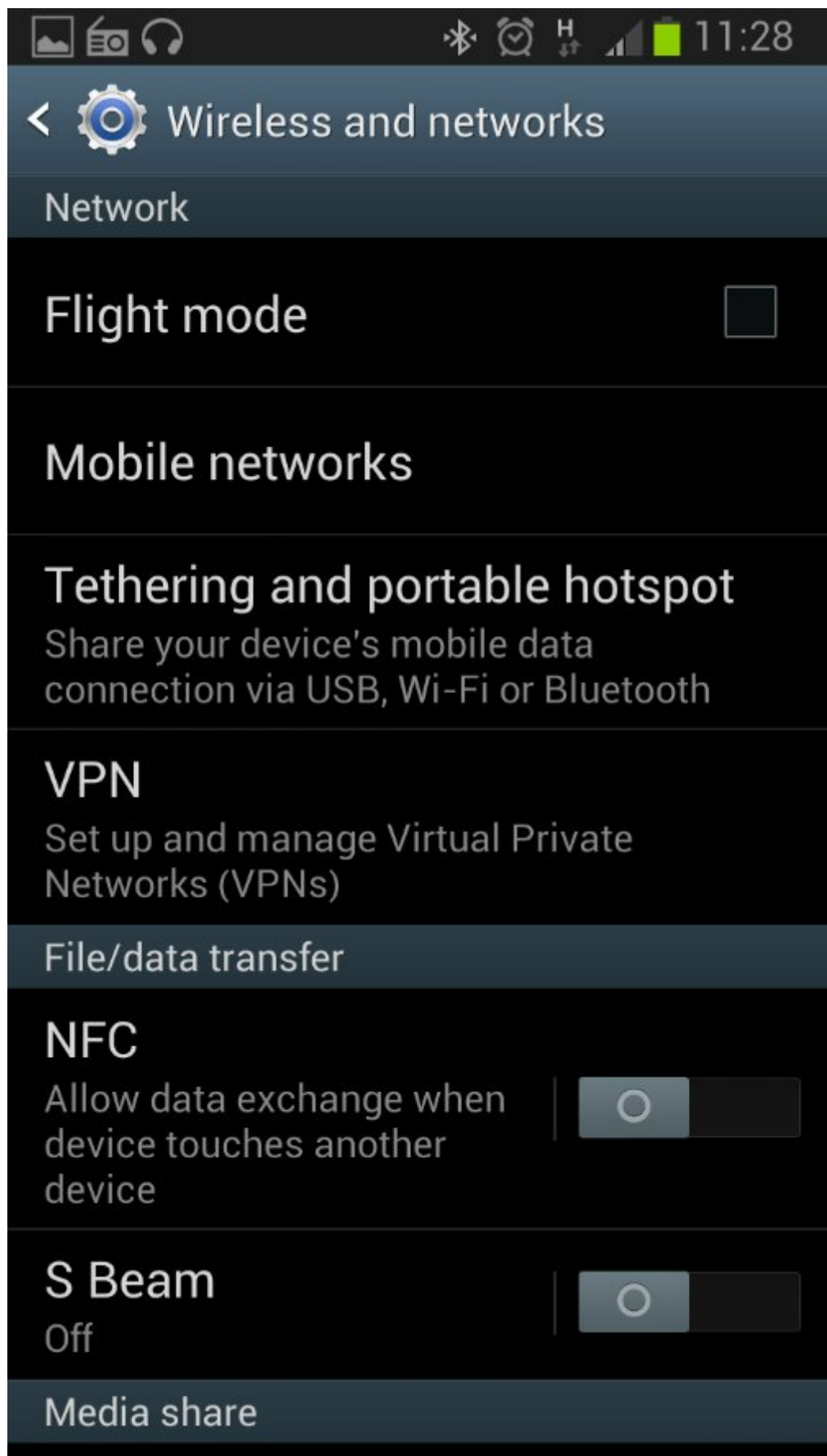
(<http://crlog.files.wordpress.com/2013/07/bluetooth-screenshot-from-2013-07-19-112732.png>)



(<http://crlog.files.wordpress.com/2013/07/bluetooth-screenshot-from-2013-07-19-113055.png>)

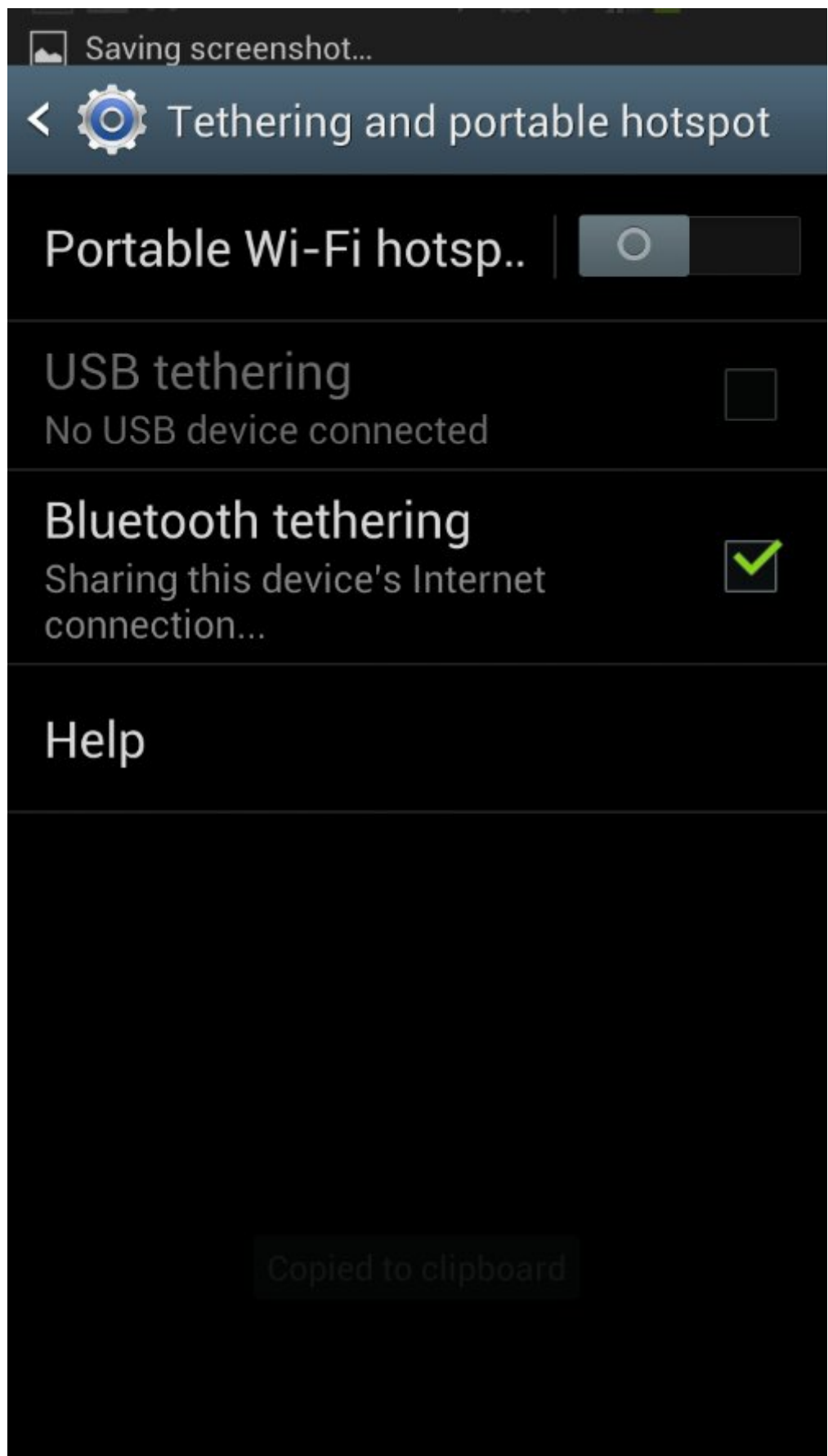


(http://crlog.files.wordpress.com/2013/07/wp-id-screenshot_2013-07-



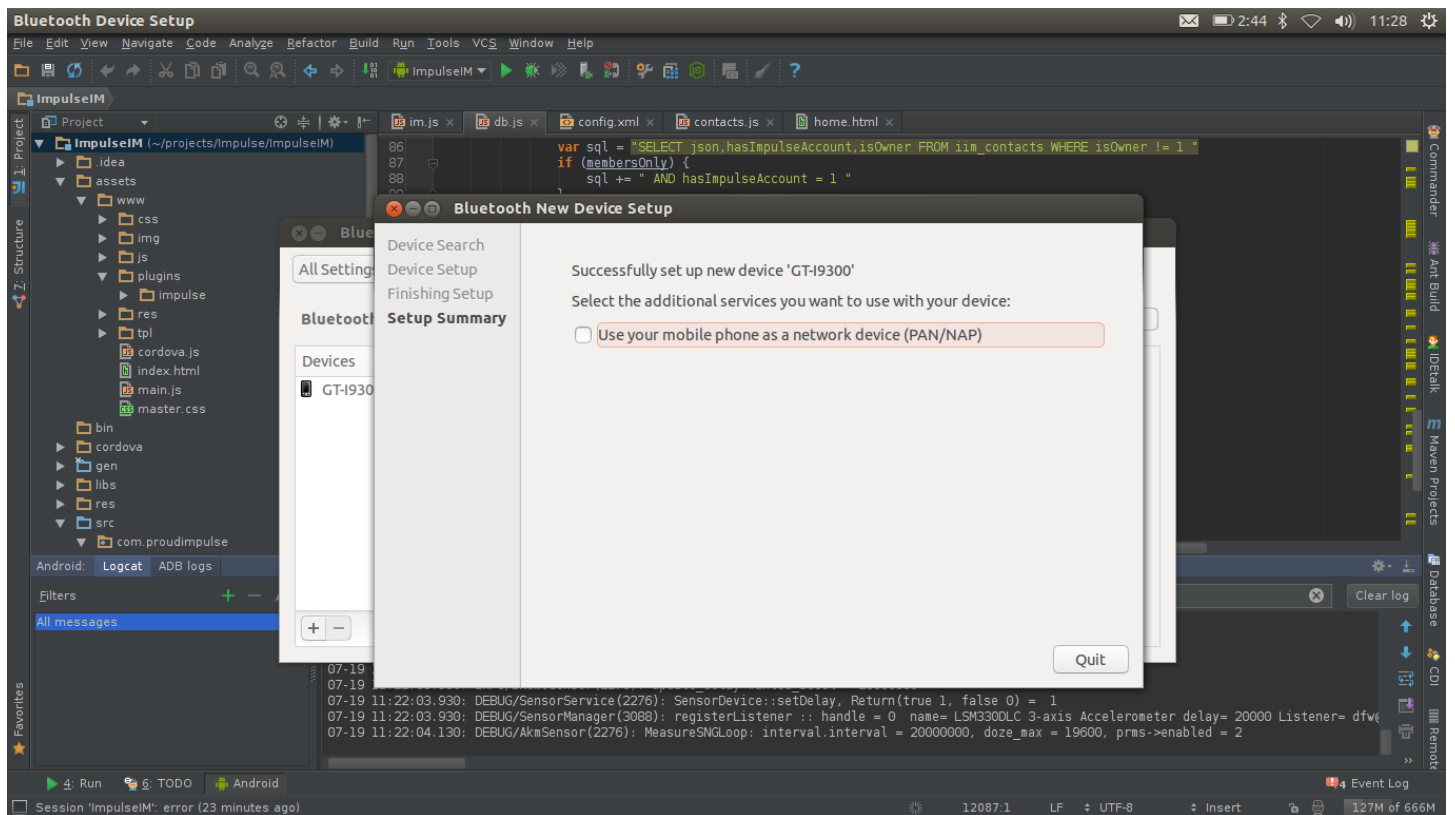
19-11-26-56.png)

(http://crlog.files.wordpress.com/2013/07/wpidscreenshot_2013-07-

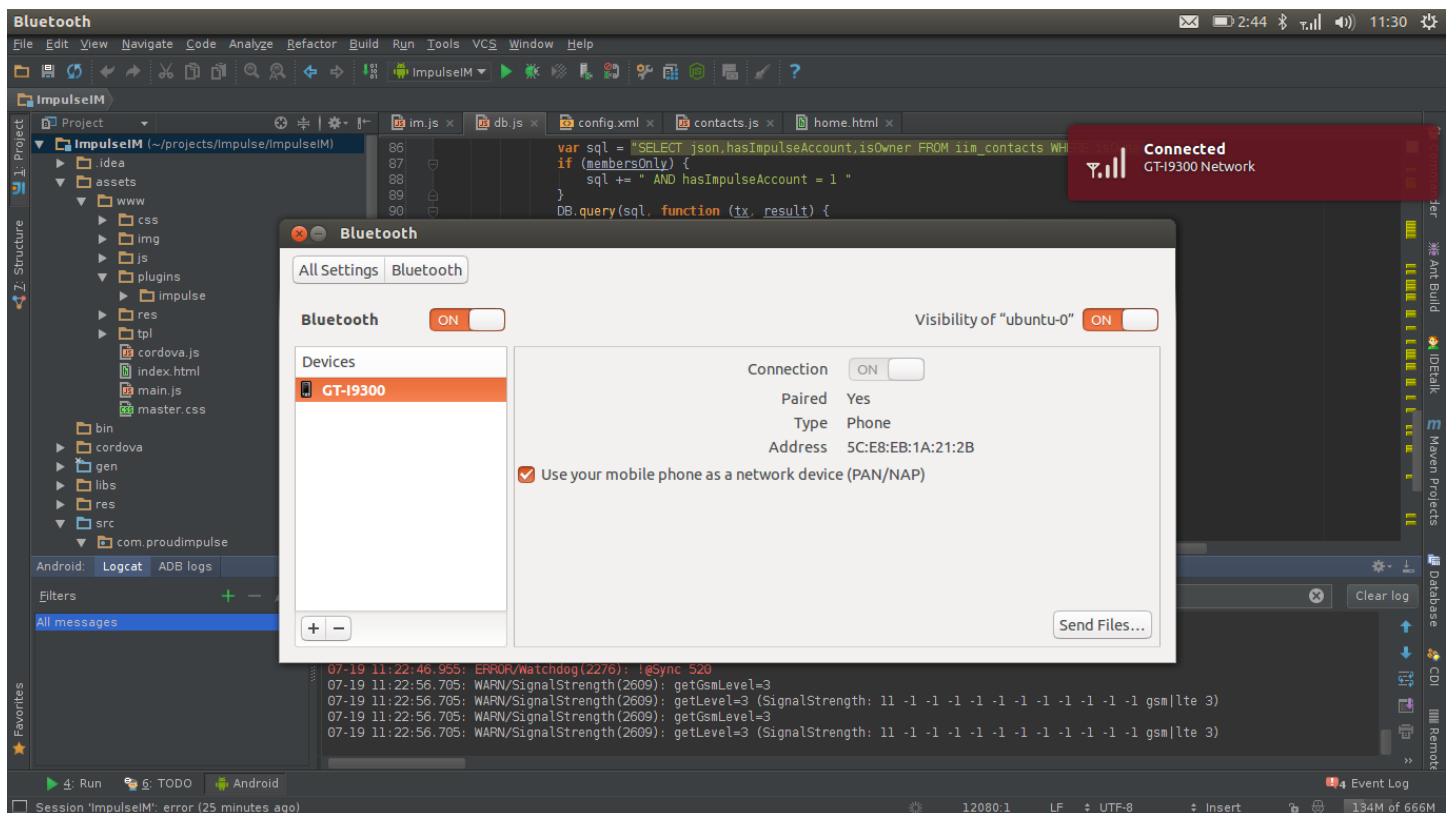


19-11-28-54.png)

(http://crlog.files.wordpress.com/2013/07/wp-id-screenshot_2013-07-19-11-28-59.png)



(<http://crlog.files.wordpress.com/2013/07/bluetooth-screenshot-from-2013-07-19-112816.png>)



(<http://crlog.files.wordpress.com/2013/07/bluetooth-screenshot-from-2013-07-19-113016.png>)

Any questions, suggestions, feel free to ask.

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**Fayçal Rezig** • a year ago

I have a question about "Android ADB Shell"

is it possible to connect from my computer (ADB Shell) to my phone without wire

i want to send events and commands with bluetooth or Wifi connection???

 |  • Reply • Share ›**majithg** • 2 years ago

Hello...! I've connect all the things... but the eclipse says like this.....

[2014-12-07 23:50:33 - B1] -----

[2014-12-07 23:50:33 - B1] Android Launch!

[2014-12-07 23:50:33 - B1] adb is running normally.

[2014-12-07 23:50:33 - B1] Performing com.button1.eg1.MainActivity activity launch

[2014-12-07 23:50:33 - B1] Automatic Target Mode: using device '192.168.44.1:4455'

[2014-12-07 23:50:33 - B1] Uploading B1.apk onto device '192.168.44.1:4455'

[2014-12-07 23:51:03 - B1] Failed to install B1.apk on device '192.168.44.1:4455': timeout

[2014-12-07 23:51:03 - B1] Launch canceled!

plz... reply to my mail..! " majithg@gmail.com "

 |  • Reply • Share ›**irrelevant** • 2 years ago

Settings -> Tethering and portable hotspot then enable "Bluetooth tethering"

** BLOCKED BY CARRIER **

So, how to do this **WITHOUT ROOT** ?

 |  • Reply • Share ›**zcourts** → irrelevant • 2 years ago

I don't know. Never had that issue...

 |  • Reply • Share ›**vidia** • 3 years ago

I can't actually get mine working. I dont have Tethering enabled by my carrier, but I tried WiFi.

Note: I am also on Windows 7

 |  • Reply • Share ›**jazxyqk** • 3 years ago

Awesome post, thanks! I couldn't connect via Bluetooth, but I was successful with wifi which works



great now. Very useful since my macbook has only 2 usb ports.

^ | v • Reply • Share ›



lenin • 3 years ago

Does this works with Wi-fi too?

^ | v • Reply • Share ›



zcourts → lenin • 3 years ago



Yeah pretty much. Don't remember where it varied but I've debugged over wifi doing a similar thing

^ | v • Reply • Share ›



jcontini • 3 years ago

Thank you for this - so useful and so simple. After entered the two commands in the terminal, and had Phonegap's CLI build and deploy over bluetooth on the first try. Awesome.

^ | v • Reply • Share ›



Dmitry • 3 years ago

Fantastic. Thanks. I did it with wi-fi. It's very useful if you need to debug OTG apps.

^ | v • Reply • Share ›